



What is a Geophysicist?

Geophysicists study the interior of the Earth and planets using a range of physical and computational techniques. Some geophysicists study the Earth's gravitational and magnetic fields. Others study how earthquake waves or radio waves travel through the Earth. They then use physics and mathematics to process the data and find out what is inside the Earth. High performance computing is central to many areas of geophysics.

Geophysicists work in many areas including:

- Exploration for oil, gas and minerals
- Monitoring underground contamination and ground water
- Reducing hazards from volcanoes and earthquakes
- Researching how the Earth and planets were formed and continue to evolve

Geophysical research

Undergraduate students have opportunities to be involved in a wide range of research projects taking place in our department. Important questions being investigated include:

- Why do the Earth and planets have magnetic fields?
- Can we forecast volcanic eruptions and earthquakes?
- What was the climate like in the past?
- How did plate tectonics form the Rocky Mountains?
- Does hydraulic fracturing cause earthquakes?
- Is geothermal energy an option for Canada?



Undergraduate Geophysics program at the U of A

The geophysics degree program at the University of Alberta includes a broad range of classes in physics, mathematics, computing, geology and geophysics. The program combines both theoretical and practical aspects of geophysics, including a field school at the start of the final year. Taking the recommended set of classes will qualify you as a Professional Geophysicist.

Employment Opportunities

Recent graduates from our program have found employment in :

- Oil, gas and mineral exploration
- Environmental geophysics
- Government agencies monitoring earthquakes
- University teaching and research
- Data analysis in the financial sector
- Software development

ENROLL TODAY

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UNIVERSITY OF ALBERTA
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STUDY GEOPHYSICS

AT THE UNIVERSITY OF ALBERTA

